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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2009; month=8; day=7; hr=8; min=1; sec=42; ms=458; ]

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Reviewer Comments:

<210> 15

<211> 3933

<212> DNA

<213> Pseudomonas sp. HJ-2 (phb locus)

<400> 15

gagctcaatg cgcgccagga ctggtgtgcg aggacaaccg ggcgtcaccc ggggacattg  
60

ttcacatccg caaagcgcca gagacttgcc cgctgttcca aggtcttaat taacgaggaa  
120

tgggttaatgg gtactgcgag caatgcggca cgtatagctc tggtcaccgg tggatatgggc  
180

ggtatcggtg cggcgatcag ccagcgctg catcgggatg gcttcaccgt ggtggtgggc  
240

tgtaatccct actccagccg caaggcttcc tggattgcca cgcaactcga ggcgggcttt  
300

cacttccact gcatcgactg cgacatcacc gactgggata gcacccgcca ggccttcgac  
360

atggtgcacg agactgtcgg cccgatcgat gtattggtca acaatgccgg catcaccgcg  
420

gacggcactt tccgcaagat gtccccggaa aactggaagg cggatgatcga taccaatctc  
480

accggcctgt tcaacacaac caagcaggtc atcgagggca tgctggccaa gggctgggga  
540

cgcgtcatca acatctcctc aatcaatggc cagcgaggcc agttcgggca gaccaactac  
600

tccgcggnca aggctggcat tcatggcttc agcatggcct tggcccgcga ggtgagtggc  
660

aagggcgtga ccgtaatac ggtttcccct ggctacatca agaccgacat gaccgcggcg  
720

attcgcccgg acatcctcga agacatgatt actggcattc ccgtgggccg tctcggccag  
780

cccgaggaga tcgcctcgat cgtggcctgg ctggcctccg atcagtctgc ctatgccacc  
840

ggcgccgact tctcggtgaa tggcggcatg aacatgcagt gatgcgccat tcgcgcctc  
900

gctcagccat gacatgaggt gttccagatg atcgaagtcg ttatcgtcgc cgccactcgc  
960

accgccatcg gcgctttcca ggggagcctg gccggcactc ccgccgttga actgggcgcc  
1020

acggtgatcc gccgcctgct cgaacagacc gctctggata gcagtcaggt ggatgaagtg  
1080

atactcggcc acgtactcac cgccggtgct ggcagaatac cgctcgccag gcancnggtc  
1140

Regarding the above <213> response; per 1.823 of the Sequence Rules, the only valid responses are the Genus species of the organism, "Artificial Sequence", or "Unknown". "Artificial Sequence" and "Unknown" require explanation in the <220>-<223> section; please give the source of the genetic material. Please just list the Genus species as the <213> response; put explanatory matter in the <220>-<223> section; please correct all similar sequences.

The n's at locations 608, 1134, and 1136 are not explained above.

<210> 16

<211> 251

<212> PRT

<213> Pseudomonas sp. HJ-2 (NADPH-dependent acetoacetyl-CoA reductase  
(phbB))

<400> 16

Met	Gly	Thr	Ala	Ser	Asn	Ala	Ala	Arg	Ile	Ala	Leu	Val	Thr	Gly	Gly
1				5					10					15	

Met	Gly	Gly	Ile	Gly	Thr	Ala	Ile	Ser	Gln	Arg	Leu	His	Arg	Asp	Gly
			20					25					30		

Phe	Thr	Val	Val	Val	Gly	Cys	Asn	Pro	Tyr	Ser	Ser	Arg	Lys	Ala	Ser
		35					40						45		

Trp	Ile	Ala	Thr	Gln	Leu	Glu	Ala	Gly	Phe	His	Phe	His	Cys	Ile	Asp
	50					55					60				

Cys	Asp	Ile	Thr	Asp	Trp	Asp	Ser	Thr	Arg	Gln	Ala	Phe	Asp	Met	Val
65					70					75					80

His	Glu	Thr	Val	Gly	Pro	Ile	Asp	Val	Leu	Val	Asn	Asn	Ala	Gly	Ile
				85					90					95	

Thr	Arg	Asp	Gly	Thr	Phe	Arg	Lys	Met	Ser	Pro	Glu	Asn	Trp	Lys	Ala
			100					105						110	

Val	Ile	Asp	Thr	Asn	Leu	Thr	Gly	Leu	Phe	Asn	Thr	Thr	Lys	Gln	Val
			115				120						125		

Ile	Glu	Gly	Met	Leu	Ala	Lys	Gly	Trp	Gly	Arg	Val	Ile	Asn	Ile	Ser
	130					135					140				

Ser	Ile	Asn	Gly	Gln	Arg	Gly	Gln	Phe	Gly	Gln	Thr	Asn	Tyr	Ser	Ala
145					150					155					160

Xaa	Lys	Ala	Gly	Ile	His	Gly	Phe	Ser	Met	Ala	Leu	Ala	Arg	Glu	Val
			165						170					175	

Please correct the above <213> response to just indicate the Genus species of the organism; place explanatory matter in the <220>-<223> section. Also, the above <213> response exceeds the Sequence Rules' required 72-character line limit. The "Xaa" at location 161 is not explained above.

<210> 17  
<211> 392  
<212> PRT  
<213> Pseudomonas sp. HJ-2 (beta-ketothiolase (phbA))

<400> 17  
Met Ile Glu Val Val Ile Val Ala Ala Thr Arg Thr Ala Ile Gly Ala  
1 5 10 15

Phe Gln Gly Ser Leu Ala Gly Thr Pro Ala Val Glu Leu Gly Ala Thr  
20 25 30

Val Ile Arg Arg Leu Leu Glu Gln Thr Ala Leu Asp Ser Ser Gln Val  
35 40 45

Asp Glu Val Ile Leu Gly His Val Leu Thr Ala Gly Ala Gly Arg Ile  
50 55 60

Pro Leu Ala Arg Xaa Xaa Val Ile Ala Gly Leu Pro His Ala Val Pro  
65 70 75 80

Please correct the above <213> response. Also, the "Xaa's" at locations 69-70 are not explained above.

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Application No: 10583840 Version No: 2.0

Input Set:

Output Set:

**Started:** 2009-07-22 14:17:12.979  
**Finished:** 2009-07-22 14:17:15.807  
**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 828 ms  
**Total Warnings:** 18  
**Total Errors:** 6  
**No. of SeqIDs Defined:** 18  
**Actual SeqID Count:** 18

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (15)
E 342	'n' position not defined found at POS: 608 SEQID(15)
E 342	'n' position not defined found at POS: 1134 SEQID(15)
E 342	'n' position not defined found at POS: 1136 SEQID(15)
W 402	Undefined organism found in <213> in SEQ ID (16)
E 341	'Xaa' position not defined SEQID (16) POS (161)

**Input Set:**

**Output Set:**

**Started:** 2009-07-22 14:17:12.979  
**Finished:** 2009-07-22 14:17:15.807  
**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 828 ms  
**Total Warnings:** 18  
**Total Errors:** 6  
**No. of SeqIDs Defined:** 18  
**Actual SeqID Count:** 18

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (17)
E 341	'Xaa' position not defined SEQID (17) POS (69)
E 341	'Xaa' position not defined SEQID (17) POS (70)
W 402	Undefined organism found in <213> in SEQ ID (18)

<110>	LG CHEM, LTD.	
<120>	Poly(3-hydroxyalkanoate) Block Copolymer Having Shape Memory Effect	
<130>	LC05PCT042	
<140>	10583840	
<141>	2009-07-22	
<150>	KR 10-2005-0059907	
<151>	2005-07-04	
<160>	18	
<170>	KopatentIn 1.71	
<210>	1	
<211>	18	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Choi3 (PCR Primer)	
<400>	1	
	ccgccstgsa tcaagtac	18
<210>	2	
<211>	20	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Choi4 (PCR Primer)	
<400>	2	
	gytsgtgsyg tcyycgttcc	20
<210>	3	
<211>	24	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	HJ-PHB-N (PCR Primer)	
<400>	3	
	caccatgctg agttgcgctc tagc	24
<210>	4	

<211> 27  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> HJ-PHB-C (PCR Primer)

<400> 4  
tcadmstyty acrtarcgkc ctggygc

27

<210> 5  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> SCL-1 (PCR Primer)

<400> 5  
gatcgatacc aatctcaccg

20

<210> 6  
<211> 21  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> SCL-2 (PCR Primer)

<400> 6  
caaagccagt ggttcgacgt a

21

<210> 7  
<211> 19  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> SCL-3 (PCR Primer)

<400> 7  
ctgctgaaac tgttggagc

19

<210> 8  
<211> 47  
<212> DNA  
<213> Artificial Sequence  
  
<220>



<223> SD-BA-N (PCR Primer)

<400> 8  
gggggtacca ataaggagat atacatatgg gtactgcgag caatgcg 47

<210> 9  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> BA-C (PCR Primer)

<400> 9  
cccactagtt cagcgctcga tggccagc 28

<210> 10  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> SD-phbC-N (PCR Primer)

<400> 10  
gggcatatga ccagaagaa caacagcg 28

<210> 11  
<211> 39  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> phbC-C (PCR Primer)

<400> 11  
cccactagtt cadmscttga chtaacgtcc tggcgcygc 39

<210> 12  
<211> 756  
<212> DNA  
<213> Pseudomonas sp. HJ-2

<220>  
<221> variation  
<222> (482)  
<223> n=A, C, G or T

<400> 12

atgggtactg cgagcaatgc ggcacgtata gctctggtca ccggtggtat gggcggtatc	60
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ccctactcca gccgcaaggc ttcttggtatt gccacgcaac tcgaggcggg ctttcaacttc	180
cactgcacg actgcgacat caccgactgg gatagcacc gccaggcctt cgacatggtg	240
cacgagactg tcggcccgat cgatgtattg gtcaacaatg ccggcatcac ccgcgacggc	300
actttccgca agatgtcccc ggaaaactgg aaggcgggtga tcgataccaa tctcacgggc	360
ctgttcaaca caaccaagca ggtcatcgag ggcatgctgg ccaagggctg gggacgcgtc	420
atcaacatct cctcaatcaa tggccagcga ggccagttcg ggcagaccaa ctactccggc	480
gncaaggctg gcattcatgg cttcagcatg gccttggccc gcgagggtgag tggcaagggc	540
gtgaccgtca atacggtttc ccctggctac atcaagaccg acatgaccgc ggcgattcgc	600
ccggacatcc tcgaagacat gattactggc attcccgtag gccgtctcgg ccagcccag	660
gagatcgctt cgatcgtagg ctggctggcc tccgatcagt ctgcctatgc caccggcgcc	720
gacttctcgg tgaatggcgg catgaacatg cagtga	756

<210> 13  
 <211> 1179  
 <212> DNA  
 <213> *Pseudomonas* sp. HJ-2

<220>  
 <221> variation  
 <222> (207)  
 <223> n=A, C, G or T

<220>  
 <221> variation  
 <222> (209)  
 <223> n=A, C, G or T

<400> 13	
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accgctctgg atagcagtca ggtggatgaa gtgatactcg gccacgtact caccgccggt	180
gctggcagaa taccgctcgc caggcaacng gtcacgcgcg gcctgccaca cgcggtaccg	240
gcgatgacct tgaacaaggc ctgtggctcc ggctgaaaag ccctgcacct gggcgcccag	300
gccatccgct gtggcgatgc cgagggtggtg attgccggtg gcatggagaa catgagcctg	360
tcgtectatg tcttgcccaa ggcccgcacc ggctgcgca tgggccacgc gcagctggtc	420

gacagcatga tcgtcgacgg cctgtgggac gccttcaacg actaccacat ggggatcact	480
gccgagaacc tggtagacaa gtacggcatc agccgcgaag cccaggacga attcgccgcc	540
gcctcgcagc agaaagccgt ggcgcccatc gagaccggtc gcttcgcgca cgagatcgtc	600
ccggtgagca ttccgcagcg caagggcgag gcgctgagct tcgacaccga cgaacagcca	660
cgcgccggca ccaccgccga gtcgctgggc aagctgaaac cggccttcaa gaacgacggc	720
agcgttactg ccggcaacgc ttccagtctc aacgacggcg ccgccgcggc actgctgatg	780
agtgcggcaa aggcgcgacg gcttggctctg ccagtgtctg cgaagatcgc cgcctacgcc	840
aatgcggcgc tcgaccgggc gatcatgggt atcggaccgg tgtcggccac ccgcagttgc	900
ctggagaagg cgggctggag tctggcagag ctggatctga tcgaggccaa tgaagccttc	960
gcggcccagc ccctggccgt gggtcaggag ctgggctggg atgctggcag ggttaacgtc	1020
aacggcggcg ccacgcacct cggccacccc attggcgccct ccggctgccg cgtactggtc	1080
agcctgctgc atgaaatgct caggcgcgac gcgaaaaaag gcctcgtac cctgtgtatc	1140
ggtggcggcc agggcgtggc gctggccatc gagcgtga	1179

<210> 14  
 <211> 1701  
 <212> DNA  
 <213> Pseudomonas sp. HJ-2 (SCL-PHA synthase (phaC))

<400> 14	
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ttcgtcctgc agcaactgcg cttatacgtg gcgcaaaata cttggttcag cgggcacgac	120
caaagccagt ggttcgacgt acctgtcgag gcgttgagc aactgcaggc ggactaccaa	180
caacagtggg ccgaacttgg ccagcaattg ctgagctgcc agccgttcgc attcagcgat	240
cgtcgcttcg ccagtggcaa ctggagcgaa ccgctgttcg gttccctggc tgccttctac	300
ctgctgaatt ccggtttcct gctgaaactg ttggagcttc tcccacatga tgagcagaag	360
ccccgccagc gcttgcgtta cttgatcgag caagcgattg ccgcaagcgc cccaagtaac	420
tttctgctga gcaacctga tgcctgcaa cgcctagtgg aaaccaggg cgccagccta	480
ctaagtggcc tgttgcactc tgccagtgc ctgcaggcag gcaagtgcg ccaatgtgac	540
ttgggcgatt tcgaagtcgg cgtgaatctg gccaccaccc ctggtgccgt ggtactggaa	600
acccctctgt tccagctgat ccagtattcg ccgctcagcg aaacgcaata ccagcggccg	660
atattcatgg tcccgcctg gatcaacaag tactacatcc ttgacctcg gcccgaaaac	720

tctctaatacc gtcactact ggagcgaggc catcaagttt ttctgatgtc ctggcgcaac	780
ttcactcagg aacaggccga catcacctgg gagcagatca tccaggacgg agtgatcagc	840
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atcggcggca ccatgctgag ttgcgtctta gcggtgctgg cagcgctgg cgaccaggac	960
attgccagcc tgagtctatt cgccactttt cttgactacc ttgataccgg gccgatcagc	1020
gtcttcgtcg atgagcaact ggtggcctac cgtgagcgca ccatcgggtg ccatggtggc	1080
aaatgtggcc tgttccggcg tgaggacatg ggcaatacct tctccctgct ggggccaac	1140
gagctgtggg ggaactacaa cgtagacaaa tatctcaagg ggcagaagcc gctggctctg	1200
ggtctactgt tctggaacaa cgacagcacc aatctgccgg ggccctgta ttgctggtat	1260
ctgcgccaca cctacctgca gaacgacctc aaatcggggg agttggatct gtgcggcgtc	1320
aagttggatc tgcgggccat agacgcacca gcctacatct tgggaacca tgacgaccac	1380
atcgtgccct ggcgaaagcg ctatgccagc acggaattgc tgggaggtcc aaagcgttt	1440
gtcctcggcg cctccggcca catcgccggg gtgatcaacc cgccagatag gaacaagcg	1500
cattactggg tcaatgaaca catagcgccg gtagctgacg actggctgca gggagctcag	1560
cagcattccg gcagttggtg gggtgactgg ttgcctggt tgaccggcta tgccggccca	1620
cgcaagcctg ccatcactat gctgggcagt gccgagtacc ccccgcttga acatgcgcca	1680
ggacgttatg tgaagctatg a	1701

<210> 15  
 <211> 3933  
 <212> DNA  
 <213> Pseudomonas sp. HJ-2 (phb locus)

<400> 15	
gagctcaatg cgcgccagga ctggtgtgcg aggacaacc ggcgtcacc ggggacattg	60
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tggttaatgg gtactgcgag caatgcggca cgtatagctc tggtcaccgg tggatgggc	180
ggtatcggta cggcgatcag ccagcgctg catcgggatg gcttcaccgt ggtggtgggc	240
tgtaatccct actccagcgg caaggettec tggattgccg cgcaactcga ggcgggcttt	300
cacttccact gcatcgactg cgacatcacc gactgggata gcaccgcca ggccttcgac	360
atggtgcacg agactgtcgg cccgatcgat gtattggtca acaatgccgg catcacccgc	420
gacggcactt tccgcaagat gtccccggaa aactggaagg cggtgatcga taccaatctc	480

accggcctgt tcaacacaac caagcaggtc atcgagggca tgctggccaa gggctgggga	540
cgcgatcatca acatctcttc aatcaatggc cagcgaggcc agttcgggca gaccaactac	600
tccgcggnca aggetggcat tcatggcttc agcatggcct tggcccgcga ggtgagtggc	660
aagggcgtga ccgtcaatac ggtttccctt ggtacatca agaccgacat gaccgcggcg	720
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cccgaggaga tcgcctcgat cgtggcctgg ctggcctccg atcagtctgc ctatgccacc	840
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gctcagccat gacatgaggt gttccagatg atcgaagtcg ttatcgtcgc cgccactcgc	960
accgccatcg gcgctttcca ggggagcctg gccggcactc ccgcggttga actgggcgcc	1020
acggatgatcc gccgcctgct cgaacagacc gctctggata gcagtcaggt ggatgaagtg	1080
atactcggcc acgtactcac cgccggtgct ggcagaatac cgctcgccag gcancnggtc	1140
atcgccggcc tgccacacgc cgtaccggcg atgacctga acaaggtctg tggtccggc	1200
ctgaaagccc tgcacctggg cgcccaggcc atccgctgtg gcgatgccga ggtggtgatt	1260
gccggtggca tggagaacat gagcctgtcg tcctatgtcc tgcccaaggc ccgcaccggc	1320
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ttcaacgact accacatggg gatcactgcc gagaacctgg tagacaagta cggcatcagc	1440
cggaagccc aggacgaatt cgccgccgcc tcgcagcaga aagccgtggc cgccatcgag	1500
accggtcgct tccgcgacga gatcgccccg gtgagcattc cgcagcgcaa gggcgaggcg	1560
ctgagcttcg acaccgacga acagccacgc gccggcacca ccgccgagtc gctgggcaag	1620
ctgaaaccgg ccttcaagaa cgacggcagc gttactgccg gcaacgcttc cagtctcaac	1680
gacggcgccc ccgcggtact gctgatgagt gcggcaaaag ccgcagcgct tggctgccca	1740
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ggaccggtgt cggccacccc cagttgcctg gagaaggcgg gctggagtct ggcagagctg	1860
gatctgatcg aggccaatga agccttcgcg gcccaggccc tggccgtggg tcaggagctg	1920
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ggcgctcccg gctgcccgct actggtcagc ctgctgcatg aaatgctcag gcgcgacgcg	2040
aaaaaaggcc tcgctaccct gtgtatcggg gccggccagg gcgtggcgct ggccatcgag	2100
cgctgagtga cgctttcgcg actctgccgg acgtgcccc ctgcaccgc accgccaggc	2160

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cctggagacg ccatggacaa cggacacacc ttgtctact actggtcggg tcaggcgccc	2280
ttcatcgcca gcttcgtcct gcagcaactg cgcttatacg tggcgcaaaa tacttggttc	2340
agcgggcacg accaaagcca gtggttcgac gtacctgtcg aggcgttga gcaactgcag	2400
gcggactacc aacaacagtg ggccgaactt ggccagcaat tgctgagctg ccagccgttc	2460
gcattcagcg atcgtcgtct cgcagtggc aactggagcg aaccgctgtt cggttccctg	2520
gctgccttct acctgctgaa ttccggtttc ctgctgaaac tgttgagct tctcccatc	2580
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gccccaahta actttctgct gagcaacct gatgcctgc aacgcctagt ggaaaccag	2700
ggcgccagcc tactaagtgg cctgttgcat ctgcccagt acctgcaggc aggcaagttg	2760
cgccaatgtg acttgggcca ttctgaagtc ggcgtgaatc tggccaccac ccctggtgcc	2820
gtggtactgg aaacctctct gttccagctg atccagtatt cgcctcag cgaaacgcaa	2880
taccagcggc cgatattcat ggtcccgcc tggatcaaca agtactacat ccttgacctc	2940
gggcccgaat actctctaata ccgtcatcta ctggagcgag gccatcaagt tttctgatg	3000
tcctggcgca acttcaactca ggaacaggcc gacatcacct gggagcagat catccaggac	3060
ggagtgatca gcgccctgcg cactaccgg gccatcagtg gtgagcgcca cctgaactgt	3120
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3933

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<211> 251

<212> PRT

<213> Pseudomonas sp. HJ-2 (NADPH-dependent acetoacetyl-CoA reductase (phbB))

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Trp Ile Ala Thr Gln Leu Glu Ala Gly Phe His Phe His Cys Ile Asp  
50 55 60

Cys Asp Ile Thr Asp Trp Asp Ser Thr Arg Gln Ala Phe Asp Met Val  
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His Glu Thr Val Gly Pro Ile Asp Val Leu Val Asn Asn Ala Gly Ile  
85 90 95

Thr Arg Asp Gly Thr Phe Arg Lys Met Ser Pro Glu Asn Trp Lys Ala  
100 105 110

Val Ile Asp Thr Asn Leu Thr Gly Leu Phe Asn Thr Thr Lys Gln Val  
115 120 125

Ile Glu Gly Met Leu Ala Lys Gly Trp Gly Arg Val Ile Asn Ile Ser  
130 135 140

Ser Ile Asn Gly Gln Arg Gly Gln Phe Gly Gln Thr Asn Tyr Ser Ala  
145 150 155 160

Xaa Lys Ala Gly Ile His Gly Phe Ser Met Ala Leu Ala Arg Glu Val  
165 170 175

Ser Gly Lys Gly Val Thr Val Asn Thr Val Ser Pro Gly Tyr Ile Lys  
180 185 190

Thr Asp Met Thr Ala Ala Ile Arg Pro Asp Ile Leu Glu Asp Met Ile  
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Thr Gly Ile Pro Val Gly Arg Leu Gly Gln Pro Glu Glu Ile Ala Ser  
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Asp Phe Ser Val Asn Gly Gly Met Asn Met Gln  
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 <212> PRT  
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 Val Ile Arg Arg Leu Leu Glu Gln Thr Ala Leu Asp Ser Ser Gln Val  
 35 40 45  
  
 Asp Glu Val Ile Leu Gly His Val Leu Thr Ala Gly Ala Gly Arg Ile  
 50 55 60  
  
 Pro Leu Ala Arg Xaa Xaa Val Ile Ala Gly Leu Pro His Ala Val Pro  
 65 70 75 80  
  
 Ala Met Thr Leu Asn Lys Val Cys Gly Ser Gly Leu Lys Ala Leu His  
 85 90 95  
  
 Leu Gly Ala Gln Ala Ile Arg Cys Gly Asp Ala Glu Val Val Ile Ala  
 100 105 110  
  
 Gly Gly Met Glu Asn Met Ser Leu Ser Ser Tyr Val Leu Pro Lys Ala  
 115 120 125  
  
 Arg Thr Gly Leu Arg Met Gly His Ala Gln Leu Val Asp Ser Met Ile  
 130 135 140  
  
 Val Asp Gly Leu Trp Asp Ala Phe Asn Asp Tyr His Met Gly Ile Thr  
 145 150 155 160  
  
 Ala Glu Asn Leu Val Asp Lys Tyr Gly Ile Ser Arg Glu Ala Gln Asp  
 165 170 175  
  
 Glu Phe Ala Ala Ala Ser Gln Gln Lys Ala Val Ala Ala Ile Glu Thr  
 180 185 190  
  
 Gly Arg Phe Arg Asp Glu Ile Val Pro Val Ser Ile Pro Gln Arg Lys  
 195 200 205  
  
 Gly Glu Ala Leu Ser Phe Asp Thr Asp Glu Gln Pro Arg Ala Gly Thr  
 210 215 220  
  
 Thr Ala Glu Ser Leu Gly Lys Leu Lys Pro Ala Phe Lys Asn Asp Gly  
 225 230 235 240  
  
 Ser Val Thr Ala Gly Asn Ala Ser Ser Leu Asn Asp Gly Ala Ala Ala  
 245 250 255  
  
 Val Leu Leu Met Ser Ala Ala Lys Ala Ala Ala Leu Gly Leu Pro Val